Oct. 22, 1996

[54]	TEST PATTERN

[75] Inventor: Alan R. Pinkus, Fairborn, Ohio

[73] Assignce: The United States of America as represented by the Secretary of the

Air Force, Washington, D.C.

[21] Appl. No.: 500,302

[22] Filed: Jul. 10, 1995

250/339.02, 339.05, 495.1; 345/82, 83

[56] References Cited

U.S. PATENT DOCUMENTS

4,695,720 9/1987 Rieder et al. 250/2 4,965,448 10/1990 Morse et al. 25 4,967,373 10/1990 Ginsburg 5,070,239 12/1991 5,184,114 2/1993 Brown 25 5,200,622 4/1993 Rouchon et al. 2 5,204,532 4/1993 Rosenthal 2 5,206,511 4/1993 Apperson et al. 2 5,323,002 6/1994 Sampsell et al. 250

OTHER PUBLICATIONS

Evershed et al. "A Field Test Set for Night Vision Devices" Optical Engineering/vol. 15 No. 3/May-Jun. 1976, pp. 251-254.

Humphreys "An Image Scanner for Testing Night Vision Systems" Electro-Optics/Laser International/9-11 Mar. 1976/pp. 183-187.

Grinberg et al. "Visible to Infrared Image Converter for Dynamic Infrared Target Simulation Applications" SPIE vol. 226 IIST (1980)/pp. 129–132.

Primary Examiner—Davis L. Willis
Assistant Examiner—Kiet T. Nguyen
Attorney, Agent, or Firm—Gerald B. Hollins; Thomas L.
Kundert

[57] ABSTRACT

A night vision device test arrangement for determination of spectral sensitivity field of view and other operating characteristics of night vision devices. The test arrangement includes a controllable array of radiant energy emitters such as narrow-band light emitting diode elements used to display a night vision device test pattern. The displayed test pattern may be located in the infrared or infrared and visible spectrum regions and may be altered by user command to have different configurations including different physical size, shape and array location and different spectral content. Control of the test pattern may employ a computer or a manual selection apparatus. The disclosed apparatus is especially suited to in-the-field GO/NO GO rapid performance verification of night vision device equipment. Military and non-military uses are contemplated.

18 Claims, 4 Drawing Sheets

